

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-243968

(43)Date of publication of application : 08.09.2000

(51)Int.Cl.

H01L 29/786

H01L 21/336

G02F 1/136

H01L 21/20

H01L 21/268

(21)Application number : 11-046226

(71)Applicant : MATSUSHITA ELECTRIC IND CO LTD

(22)Date of filing : 24.02.1999

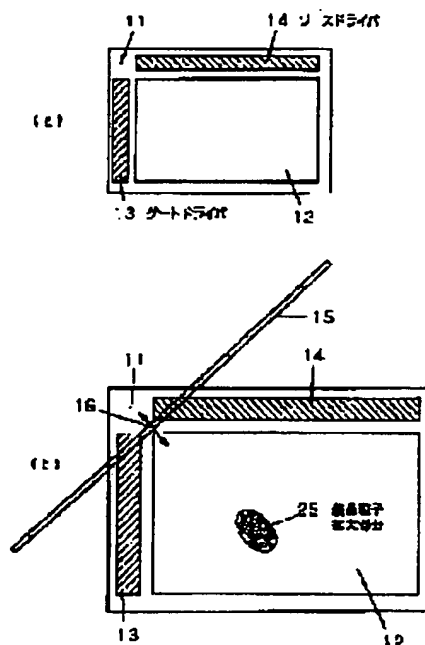
(72)Inventor : OGAWA KAZUFUMI
ADACHI KAZUYASU

(54) THIN FILM TRANSISTOR, MANUFACTURE THEREOF, LIQUID CRYSTAL DISPLAY DEVICE USING THE SAME AND MANUFACTURE THEREOF

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a group of high-performance thin film transistors with favorable uniform displaying performance on a large screen and a liquid crystal display device using it when thin film transistors using polycrystalline silicon are used as a driving circuit part in the liquid crystal display device.

SOLUTION: In a thin film transistor having a polycrystalline silicon thin film formed on a transparent insulating substrate 11 as an active region, crystal grains of the polycrystalline silicon thin film are grown anisotropically in a specific direction in the surface, so as to make silicon crystal grains a slender shape, and make the gate length direction of the thin film transistor approximately 45° to the longitudinal direction of the crystal grains, so that characteristic variations of all the TFT formed in an array substrate are minimized.



BEST AVAILABLE COPY

LEGAL STATUS

[Date of request for examination] 10.03.2000

[Date of sending the examiner's decision of rejection] 03.09.2002

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

BEST AVAILABLE COPY



KOREAN PATENT ABSTRACTS

(11)Publication number: 1020000001168 A
(43)Date of publication of application: 15.01.2000

(21)Application number: 1019980021287
(22)Date of filing: 09.06.1998
(51)Int. Cl: G02F 1/136

(71)Applicant: LG.PHILIPS LCD CO., LTD.
(72)Inventor: JUNG, YUN HO

(54) MANUFACTURING METHOD OF LIQUID CRYSTAL DISPLAY FOR THIN FILM TRANSISTOR

(57) Abstract:

PURPOSE: An LCD is provided to confirm the equality of a device by forming a thin film transistor with its channel direction equalized through the whole thin film.

CONSTITUTION: The LCD manufacturing method is composed of the steps of: forming by photo-etching a polycrystalline silicon thin film crystallized by growing a silicon grain to a first direction to equalizing the physical property of a thin film transistor formed through the whole substrate; and manufacturing to have a certain size of a slope toward the first direction through the whole substrate.



COPYRIGHT 2000 KIPO

Legal Status

Date of final disposal of an application (20010315)
Patent registration number (1002920480000)
Date of registration (20010319)

BEST AVAILABLE COPY